

H. L. CRESS, JR.
COMB FOR BROOD CHAMBERS AND SHALLOW EXTRACTING SUPERS.
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1,426,551.

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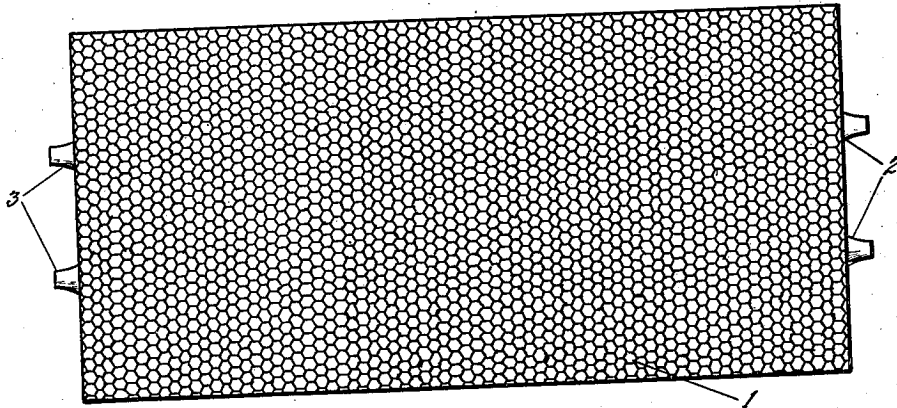


FIG. 1

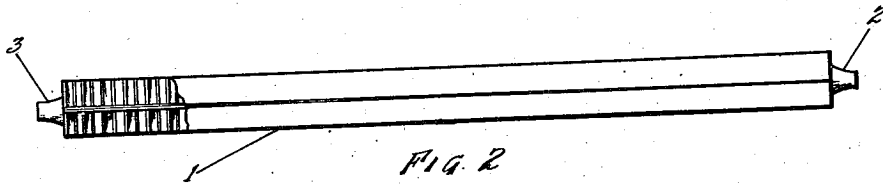


FIG. 2

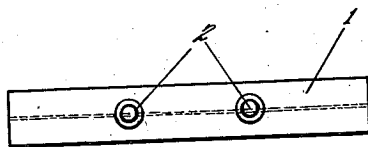


FIG. 3

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COMB FOR BROOD CHAMBERS AND SHALLOW EXTRACTING SUPERS.

1,426,551.

Specification of Letters Patent. Patented Aug. 22, 1922.

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To all whom it may concern:

Be it known that I, HURVE L. CRESS, JR., a citizen of the United States of America, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Combs for Brood Chambers and Shallow Extracting Supers, of which the following is a specification.

My invention relates to combs for brood chambers and shallow extracting supers. It has to do with the provision of a comb of novel material and construction designed to possess all of the advantages of the combs now generally used in the bee industry and in addition to possess numerous other advantages.

In the industry as organized at present, the wax comb is the one most generally used. One of the very great disadvantages of the wax comb arises from the fact that it cannot be readily cleansed. For instance, when the larvæ are attacked by European or American foul brood, it becomes necessary to remove the wax comb and destroy it. It is possible to melt this wax and reform it for subsequent use and this is commonly done. However, this is a very material source of expense in addition to the other obviously undesirable features such as the necessity for providing new combs. In addition, the sheet of wax, when initially placed in position must be supported by wire frame work and the strands of this wire frame work must be embedded in the sheet of wax.

Furthermore, the uncapping of the honey in a wax comb inevitably results in a jagged formation on the surface of the comb with the result that subsequent uncapping operations are rendered still more difficult. In addition, the removal of queen cells during the production of extracted honey is a source of great nuisance to the bee keeper and this is particularly so when he is using wax combs.

These difficulties have been somewhat recognized in the past and I am familiar with the provision of aluminum combs. These aluminum combs doubtless possess some advantages but they can only be used in the very mild climates. For one thing, they are very greatly subject to temperature changes and become so cold during the winter that they are entirely unfit for the

winter packing of bees, inevitably resulting in freezing of the bees who are unable to overcome this quality of the aluminum. Furthermore, after the cleansing of an aluminum comb, an unnecessary length of time must be consumed in the return of this comb to normal temperature.

I have solved the problem indicated above by the production of a non-metallic comb that is of sufficient lightness and rigidity to lend itself fully to the production of extracted honey. Preferably, I provide a comb which is made of celluloid and I have found that the celluloid which is normally sold commercially in the open market is of such a material that it will stand subjection to cleansing by the application thereto or the immersion therein of steam or boiling water for a period of time amply sufficient to render sterile any of the diseased spores that arise and attack the larvæ in bee keeping. The term celluloid as used herein is meant to comprise and include cellulose derivatives or nitrated cellulose substances of a low degree of nitration, such as are ordinarily procurable in the form of transparent, translucent or opaque sheets or other forms, this material being of such density, strength and imperviousness as to perfectly correspond to requirements; and the term celluloid is also meant to include those compounds of celluloid derivatives and camphor which have been treated or cured to eliminate the camphor odor.

My invention therefore has to do with the provision of a comb made of celluloid and so constructed that it may be readily placed in position in its frame, for example in a Hoffman frame. Also, my celluloid comb is of sufficient rigidity that it may be removed, cleansed by all normal operations, and replaced in its frame practically without deterioration.

The preferred embodiment of my invention is shown in the accompanying drawings wherein similar characters of reference designate corresponding parts and wherein—

Figure 1 is a plan view of my celluloid comb removed.

Figure 2 is a side elevation of the structure shown in Figure 1.

Figure 3 is an end view of the structures shown in Figures 1 and 2.

In the drawings, the comb is shown as

comprising a body portion 1 of celluloid. This body portion will be made of a thickness suitable to the frame in which it is to be mounted and is of standard form. It is
5 desirably provided upon each end with spaced integral lugs 2 and 3 which are to fit in apertures or sockets that may be readily bored or placed in the side pieces of the frame which is to carry the comb.
10 I have found that celluloid is peculiarly adaptable to the purposes for which I am here using it because it possesses a hard and comparatively impenetrable surface that is relatively free from pores and that there-
15 fore lends itself very readily to cleansing. For this reason, it will be possible to effect such cleansing by a relatively short subjec-
20 tion to the cleansing medium utilized. Furthermore, instead of exercising the great amount of time and care required in the removal of the queen cells, these queen cells may be removed from my comb merely by pinching them off or flicking them off with

the finger without any danger of leaving ragged edges or holes such as is always
25 prevalent in performing this operation upon a wax comb.

Another advantage of my celluloid comb arises from the fact that the uncapping of the honey may be very readily performed
30 without leaving any jagged surfaces, such as would remain in the similar treatment of a wax comb. In addition, my comb being non-metallic offers no insuperable obstacle to
35 the heating of the brood chamber by the bees such as is offered by the aluminum comb. On the contrary, my celluloid comb lends itself readily to this operation in all climates.

Having thus described my invention, what
40 I claim is:

As an improved article of manufacture, an artificial honeycomb formed of celluloid.

In testimony whereof I hereby affix my signature.

HURVE L. CRESS, Jr.